Section II (Amendments to the Claims)

Please amend claims 1 and 3-14, as in the following listing of claims 1-14:

1. (Currently amended) A device for fluorescence correlation spectroscopy, ~~especially a device for multicolour fluorescence correlation spectroscopy, in which light rays are focussed in a transparent medium which is located in a sample vessel, characterised by~~ comprising a vessel holder in which at least two sample vessels with a focussing reflection-coated bottom are provided, and a common cover for both sample vessels which is at least partly transparent to light ~~and has at least two plungers which each protrude into a sample vessel~~, wherein light rays impinging upon a transparent medium located in each sample vessel are reflected and focussed by the focussing reflective-coated bottom of said sample vessel to a focal point within said sample vessel.

2. (Previously presented) The device according to Claim 1, wherein the sample vessels are formed by recesses in the vessel holder.

3. (Currently amended) The device according to Claim 1, wherein the ~~focus lies inside the sample vessel~~ common cover comprises at least two light windows for directing the impinging light rays into each sample vessel, wherein said light windows are wetted by or immersed in the transparent medium in the sample vessel.

4. (Currently amended) The device according to Claim [[1]] 3, wherein said light windows are formed by plungers that each protrude into a sample vessel ~~each sample vessel exhibits pressure equalisation~~.

5. (Currently amended) The device according to Claim [[1]] 4, wherein at least one plunger has dimensions such that between the plunger and the sample vessel there remains a gap surrounding the plunger for pressure equalization within the vessel.

6. (Currently amended) The device according to claim [[1]] 4, wherein at least one plunger has a surface region perpendicular to ~~the~~ an optic axis of the focussing bottom of the sample vessel.

7. (Currently amended) The device according to claim [[4]] 1, wherein the wall of the sample vessel has an opening which opens into a supply and/or drain pipe for the transparent medium.

8. (Currently amended) A method for fluorescence correlation spectroscopy, comprising:

providing a sample vessel having a reflecting and focussing bottom and containing a transparent medium therein;

~~inserting a plunger with a light window facing the focussing bottom;~~

~~focusing~~ impinging light rays ~~in a~~ upon the transparent medium ~~which is~~ located in the sample vessel,

wherein the impinging light rays are reflected and focussed by the reflecting and focussing bottom of said sample vessel to a focal point within said sample vessel ~~quantity of the transparent medium is selected so that the light window of the plunger is wetted by the medium~~.

9. (Currently amended) The method according to Claim 8, wherein ~~the plunger is inserted to a position above the focus of the bottom~~ the impinging light rays are directed into said sample vessel through a light window that is wetted by or immersed in the transparent medium.

10. (Currently amended) The method according to Claim 9, wherein said light window is formed by a ~~the~~ plunger protruding into the sample vessel ~~is immersed in the transparent medium~~.

11. (Currently amended) The device according to claim [[1]] 4, wherein ~~the bottom of the sample vessel is a parabolic shape~~ each plunger protrudes into the sample vessel to a position above the focal point of the bottom of said sample vessel.

12. (Currently amended) The device according to claim [[1]] 6, wherein the impinging light rays are aligned perpendicular to ~~the bottom of the sample vessel~~ said surface region of the plunger.

13. (Currently amended) The method according to claim [[8]] 10, wherein ~~the bottom of the sample vessel is a parabolic shape~~ the plunger protrudes into the sample vessel to a position above the focal point of the bottom of said sample vessel.

14. (Currently amended) The method according to claim [[13]] 10, wherein the plunger has a surface region perpendicular to an optic axis of the bottom of the sample vessel, and wherein the impinging light rays are aligned ~~to enter into the sample vessel~~ perpendicular to the ~~bottom of the sample vessel for focussing within the sample vessel~~ said surface region of the plunger.